Request for Proposals
by
The Appalachian Regional Commission
for
An Assessment of Alternative Measures for Determining Economically Distressed Counties and Areas in the Appalachian Region

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I. Overview: The States' Washington Office at the Appalachian Regional Commission (ARC) invites proposals from qualified researchers and consultants to analyze the Commission's current economic classification system for designating the economic status of counties and areas within the Appalachian Region, and to develop new and perhaps more reliable alternative measures.[1] The ARC is a federal-state partnership established in 1965 to promote social development and economic competitiveness of the Appalachian Region and to bring the Region closer to parity with rest of the nation. Over the decades, as the nation has developed as a whole, both the concept and reality of regional "economic distress" has changed. During the same period, federal funding has become more and more tied to "measurable results." These trends have raised a number of policy issues about the measures used by the ARC, Congress, and the Office of Management and Budget to define economic distress and assess the movement out of distress.

Currently, three economic variables are used in the ARC county economic classification system: the three-year annual unemployment rate; per-capita market income (which is per capita income less transfer payments); and decennial poverty rates. In FY 2007 ARC converted its standard economic indicators into an index-based system.[2] These variables are examined for each county in the nation, compared to the national averages, and the resulting values are summed, averaged and ranked to create quartiles with approximately equal number of counties in each group. The ARC has conducted numerous studies of the measurement issues of economic distress. This Request for Proposal seeks to take a fresh look at these measures and the issues that have been raised about their efficacy. The Commission's purpose in conducting this research is to develop new and perhaps more reliable research techniques for identifying the most distressed and at-risk counties/areas using available annual data for the Region.

II. Scope of Work

This research project will analyze current and alternative economic distress measures and write a report on the issues, findings, conclusions and recommendations. The specific topics that should be included in the proposal are:

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[1] For a current listing of the economic designations of the 410 Appalachian counties see: http://www.arc.gov/index.do?nodeId=58.

[2] Prior to FY 2007 the Commission's economic classification system designated a county as "economically distressed" if it had a per capita market income that was two-thirds or less of the national average, and poverty and unemployment rates that were 150 percent or more of the national rate. A county was considered "competitive" if it had a per capita market income that was 80 percent of the national average and poverty and unemployment rates that were at the national average. Attainment counties were those at the national average for all three indicators.

1. Review the existing annual measures of economic distress used by federal and state entities, especially those used for economic and community development programs, and examine how these measures align with various congressional and Office of Management and Budget (OMB) definitions of economic distress. Proposals should make use of previous work by Commission staff (including reviewing unpublished data and analyses) to avoid duplication of effort in the analysis and collection of information.

2. Survey recent research and scholarly work dealing with annual measures and indicators of economic distress to identify and explore emerging efforts to redefine or improve measures of economic distress, using readily available county-level annual data and perhaps lower geographic levels.

3. Perform a qualitative assessment of existing and emerging measures of economic distress, exploring the strengths and weaknesses of each measure. To the extent practical, a comparative analysis of the trends of these measures over time should be provided, exploring for instance, persistent economic distress, and the contiguous grouping of economically distressed counties, as well as other relevant topics.

4. Make recommendations on improvements to the methodology used to identify economically distressed communities providing a range of options for consideration. The methods that are considered should be credible, transparent and likely to be acceptable to ARC, Congress and OMB.

5. Serve in an advisory capacity to the Commission in its deliberation to set policy on the measures of economic distress.

6. An analysis of the sources and costs of data needed to carry out the analyses.

The report should be written for a non-technical audience and fully relate the narrative to all descriptive statistics, analyses, graphs and tables.

Deliverables

The contract will require a draft and final report with an executive summary. The final report suitable for photocopying, an electronic copy of the final report, and an electronic data base (in an agreed upon software format) with a complete data dictionary must be submitted upon completion of the project.

III. Methodology

The successful applicant will develop a complete methodology to analyze the topics specified in the scope of work.

The methodology should include:

- A review of relevant literature on measuring distress in economically disadvantaged areas;
- Specification of the secondary data sets for an analysis of distress at a national, county-level and where feasible, sub-county level, with public or proprietary annual data sources identified;
- Methods for the compilation of data, and application of statistical techniques for analysis the geographic distribution of distress;
- Discussion of limitations on geographic coverage for specific data sets and methods to address these issues, including pooling time series, and/or aggregating geographical sub-regions to provide reliable and complete geographic coverage, and;
- Discussion of potential data acquisition problems given the current state of annualized data and the confidentiality restrictions on geographically detailed data.

Proposals can offer other methodological procedures as needed.

IV. Cost and Timing

The Commission rates this research project as a small scale research project according to ARC's rating of the level of effort for conducting research: Major research projects $250k-$300k+; Large–scale $150 to $249k; Medium–scale $75k to $149K; Small–scale $25k to $74k; Research Brief less than $25k.

The contract will be a FIRM FIXED-PRICE CONTRACT. The Commission anticipates that the research will take 3 to 6 months to complete.

Overhead Policy

The Appalachian Regional Commission's policy on allowable indirect overhead costs for university-based research has been to permit universities to charge the same rates charged to their own state agencies. For the purposes of the project under current discussion, an indirect overhead of 15 percent would be in keeping with research contracts of this size.

V. Evaluation of Proposals

All proposals will be evaluated based on the following criteria:

- Clear and complete understanding of the study objectives and tasks;
- Command of existing socioeconomic and demographic analyses and public policy on economic development;
- Complete, clearly articulated, logical study design and technically competent methodology;
- Demonstrated ability to synthesize and interpret research findings in a credible and useful manner;
- Qualifications, relevant prior experience, references from relevant prior work, and capability to carry out and support the project in a timely fashion;
- A credible management proposal;
- The cost-effectiveness of the proposed project design.

VI. Proposal Submission

An original and three copies of the proposal must be submitted to the States Washington Office, Appalachian Regional Commission, 1666 Connecticut Avenue, NW, Suite 700, Washington, D.C., 20009-1068, on or before **July 16, 2007**. For information about the RFP contact Cameron Whitman by phone at (202) 884-7746 or by e-mail at: cwhitman@arc.gov. For technical questions about data, the scope of work and methodology contact Greg Bischak, ARC Senior Economist, by phone at 202-884-7790 and via email at: gbischak@arc.gov.

VII. Background on the History of ARC's Distress and Economic Designations

ARC first developed several experimental measures of economic distress for Appalachian Counties in 1970 under the direction of its Chief Demographer, Jerome Pickard. This research led to the creation of a county-level economic classification system and distress measure based on comparison with national averages for poverty and unemployment rates, per capita market income (which is per capita income less transfer payments), and infant mortality rates.

A Distressed Counties Program was formally adopted as ARC policy and made effective at the beginning of fiscal year 1983.[3] The program was considered to be part of a "finish-up" program, as Congress was considering the dissolution of the ARC at that time. The policy established that 20 percent of Area Development funds would be set aside for projects in distressed counties. The rest of the allocation could also be used for distressed and other counties at the discretion of each state.

To identify distressed counties, the Commission selected variables that were not susceptible to short-term variation, and that would identify counties with the most structurally weak economies. Counties were ranked among all ARC counties and had to be in the lowest quartiles in at least three of the four categories to qualify as distressed. The criteria selected were:

1) the unemployment rate (three-year average);
2) the poverty rate;
3) per capita market income (PCMI, which is income excluding transfer payments); and
4) infant mortality (three-year average).

In FY 1988, the Commission discontinued using infant mortality as a measure of distress, and the remaining indicators were indexed to national averages using current criteria.[4] In addition, the Commission added a second and third economic designation for *middle* and *competitive counties*. It set the 50 and 70 percent matching rates respectively for projects in middle and competitive counties. Each state designated *competitive counties* in its state

[3] ARC Resolution #538, July 28, 1982.
[4] ARC Resolution #583, February 22, 1987.

plan using three measures: poverty rates at or below national averages; three-year unemployment rates at or below national averages; and per capita market income no less than 80 percent of the national average.

Furthermore, the Commission began tracking its counties using a five-category system: severely distressed; distressed; middle; strong; very strong. These additional categories, however, were not used for allocation or funding purposes. In FY 1995, after substantial research, the Commission modified its distress designation.[5] If a county had a poverty rate that was at least 200 percent of the national average, then it would only need to match one of the two remaining criteria (150 percent unemployment or two-thirds PCMI) to be considered distressed. As part of the research, several federal agencies and other entities were surveyed, and ARC was determined to use indicators comparable with those entities.

In FY 1997, the Commission added a fourth designation for *attainment counties* that reached or were better than national averages for all three criteria. Also, the Area Development allocation for distressed counties was increased to 30 percent. Attainment counties were deemed ineligible for Area Development funds. [6]

In 1998, the Congress added language as part of ARC's reauthorization that became an ARC Code amendment. The Commission was then specifically charged "to address the needs of severely and persistently distressed areas of the Appalachian Region and focus special attention on the areas of greatest need so as to provide a fairer opportunity for the people of the Region to share the quality of life generally enjoyed by citizens across the United States."[7]

In FY 2006 ARC added an "at-risk" designation for non-distressed counties which were nearly distressed, although this designation was made for planning purposes and did not make such counties eligible for any additional funding.[8]

In FY 2007 ARC converted its standard Distress Indicators into a National Index.[9] The three variables traditional economic variables are applied to each county in the nation (three-year annual unemployment, per-capita market income and decennial poverty rates), compared to national averages and the resulting values are summed, averaged and ranked to create quartiles with approximately equal number of counties in each group. The number of ARC counties in the worst ten percent of the distressed quartile is counted to determine the relative level of distress in Appalachia in each year. In addition an at-risk category was developed based on the remaining 15 percent of distressed quartile. Thus, ARC now has a five level economic classification system.

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[5] ARC Resolution #624, July 19, 1994.
[6] ARC Resolutions #635 & 636, August 20, 1996 and ARC Code Revisions, March 1996.
[7] Code amendment of November 13, 1998 and later change in Resolution 675 August 26, 2003 which defined distressed areas.
[8] ARC Resolution 689, August 15, 2005.
[9] ARC Resolution 696, August 26, 2006.

VIII. Selected ARC Research on Alternative Measures of Economic Distress

Since the inception of the first informal distress measures pioneered by ARC in the 1970s and implemented in 1982, it was widely recognized that such a measure was imperfect. Poverty rates are only estimated every ten years and become more out of date over the course of a decade. Unemployment rates do not measure underemployment, labor force participation rates or job creation differences. The per capita income measure is an average that does not reflect distributional differences within a county. Despite these shortcomings the distress measure worked reasonably well for the first 15 years. However, structural changes in the national and global economy began to affect the utility of the distress measure leading to a wide ranging discussion of alternative measures (see attachment for a chronology of distress methodology review process).

It is noteworthy that ARC research staff has sought to address some of these issues, particularly for the poverty and unemployment variables. Indeed, ARC commissioned two reports to explore alternatives to the unemployment variable by estimating underemployment rates for the region and counties: **Underemployment in Appalachia and the Rest of the United States, 1996-2004,** by the Keystone Research Center, 2005: http://www.arc.gov/images/reports/2006/underemployment/arc_underemployment.pdf; and **An Assessment of Labor Force Participation Rates and Underemployment in Appalachia by** David H. Bradley, Stephen A. Herzenberg, and Howard Wial, August 2001 (see: http://www.arc.gov/index.do?nodeId=1186).

ARC also commissioned a study of alternatives to the decennial poverty rates in the report **Recent Trends in Poverty in the Appalachian Region: The Implications of the U.S. Census Bureau Small Area Income and Poverty Estimates on the ARC Distressed Counties Designation** by Roger Hammer, University of Wisconsin, Applied Population Laboratory, August 2000 (see: http://www.arc.gov/index.do?nodeId=1261).

Dr. Amy Glasmeier, ARC's John C. Whitman Scholar, sought to address some of these issues by developing an alternative measure in the report **Building on Past Experiences: Creating a New Future for Distressed Counties,** Pennsylvania State University, January 1999 (see: http://www.arc.gov/index.do?nodeId=1374).

In the FY 2007 Research Division ARC will issue another RFP to research an **Alternative Employment Measures of Economic Distress in the Appalachian Region** This study would explore the availability of reliable annual data sources to **compute job creation rates and net job changes by county** for the ARC Region and evaluate how well such measures might perform as an alternative to the current unemployment variable used in ARC's economic designation system. The new Census Bureau Longitudinal Employer-Household Dynamics program offers nearly complete coverage of the region and could provide a basis for analysis and comparison to other data sets in benchmarking annual data. As the picture below shows, 9 of the 13 Appalachian states participate in this Census Bureau program with only New York, Mississippi, Georgia and Ohio not participating. The research would gather comparable data from the four non-participating states to compute comparable job creation measures so that an alternative measure for employment can be used to recompute the distress index.

IX. Comparison to Other Federal Agencies Distress Criteria and Methods.

In this section, ARC's distress measures are compared with other Federal economic development programs and the methods are reviewed and compared.

The following federal programs and proposed programs are reviewed.

1. Appalachian Regional Commission, Distressed Counties Program.
2. Delta Regional Authority.
3. Northern Great Plains Regional Authority
4. Economic Development Administration, Economic Adjustment Assistance Programs.
5. U.S. Department of Agriculture (USDA), Empowerment Zones and Enterprise Communities.
6. USDA, Rural Development Administration, Loan and Grant Program.
7. Department of Education, Title I Program.
8. Small Business Administration, HUB Zone and New Markets Programs.
9. Proposed Southwest Regional Border Authority and Southeast Crescent Authority.

Ranked vs. Level Measures. Two types of distress measures have been used by federal programs: 1) those that apply absolute measures, and 2) those that employ ranked measures in the eligibility formula. A program is defined as using a set of absolute criteria if a minimum/maximum level of an indicator must be attained. The ARC's Distressed Counties Program is an example of a level measure. The ranked measure criteria are based on the ranking or score relative to other potentially eligible areas. For each type of measure however, there is a threshold value that defines eligibility. ARC's distressed criteria could be converted to a ranking procedure that could then be used to target, for example, the quartile of counties with the worst scores. The distinction between the absolute and ranked formulations provides a useful framework for comparing indicators.

Most federal programs use absolute criteria for determining distress eligibility, although there has been a recent trend toward more open-ended methods for determining distress through multiple methods. The most frequently used indicators in these programs include:

- incidence of poverty in a particular area;
- population or migration measures;
- housing measures;
- unemployment rate or the number of unemployed; and
- variations of the income measure.

Typically, the indicators are used in combination. For example, the incidence of poverty is frequently applied in combination with employment measures, income and housing indicators. At the county-wide level, few agencies use a single criterion.

The table below presents the indicators used across all types of domestic programs. The indicators are defined in terms of seven broad categories: poverty, income, employment, population, housing measures, social indicators and infrastructure.

Table 1. Comparison of Major Federal Agencies Distress Indicators

Program	Poverty	Income	Employment	Population	Housing	Social/ Economic
ARC	*	*	*			
USDA1	*					
USDA2		*	*	*		
DRA		*	*	*		*
Ed Title l	*					*
EDA		*	*	*		*
NGPA	*		*	*		
HUD	*			*	*	
SBA	*	*				

Code	**Programs**
ARC =	Appalachian Regional Commission
USDA1 =	USDA, Empowerment Zones and Enterprise Communities.
USDA2 =	USDA, Rural Economic Development Loan and Grant Program
DRA =	Delta Regional Authority
Ed Tile 1 =	Department of Education, Title I Program
EDA=	Economic Development Agency, Economic Adjustment Assistance.
HUD =	Community Development Block Grant
NGPA =	Northern Great Plains Regional Authority
SBA =	Small Business Administration, HUB Zone and New Markets

Poverty: poverty rate.

Income measures: per capita market income; per capita income; median income.

Employment measures: unemployment rate; employment; number of unemployed

Population measures: population level; percent change in population; migration.

Housing measures: overcrowded housing; age of housing; substandard housing; housing management; cost of housing production; housing built prior to 1940; housing with incomplete plumbing.

Social measures: number of distressed families; number of children eligible for free school lunches; incidence of violent crime; health status; number receiving public assistance.

Findings. In summary the Federal programs use a combination of economic, population, housing and social indicator measures. Federal distressed area programs that focus on general economic development and related infrastructure use a set of measures consistent with those used by the Commission. Poverty, income and employment are clearly the dominant indicators across programs.

In recent years, there has been a movement away from a specific set of criteria toward a more open-ended approach to determining distress. For example, the Economic Development Administration once had a defined set of criteria for its two major economic adjustment program, but now it has adopted an open-ended approach based on different types of economic adjustment. The Delta Regional Authority has adopted an approach similar to EDA, with unemployment, per capita income and a "special needs" approach that addresses out-migration, underemployment, plant closures, trade-related impacts, depletion of natural resources, defense-related industrial restructuring, and natural disasters. The Northern Great Plains Regional Authority is developing distress criteria, but the enabling legislation mentions high unemployment and poverty and out-migration.

In addition to these programs there are a few proposals pending for new regional commissions: the Southwest Regional Borders Authority and the Southeast Crescent Authority. The Southwest Regional Borders Authority pending legislation (S.2522) explicitly cites ARC's distress criteria in the bill as the basis for determining distress. The Southeast Crescent Authority bill (HR 3618) mentions persistent high poverty and unemployment, as well as low income as possible criteria, but leaves it up to the Commission to determine the final criteria.

Significantly, the Department of Education Title I program, as directed by Congress, has begun to use inter-census year estimates of county poverty rates to allocate its funds. These estimates were created explicitly by the Census Bureau to meet the congressional directive. Nonetheless, many program managers recognize that the estimates are inaccurate for small population counties because they are not based on survey data.

Sub-County Distress Measurements

ARC recognizes that some areas in non-distressed counties of Appalachia are characterized by high poverty and low income to such an extent when compared to national averages that they should be considered distressed and should be an important focus of ARC assistance. Accordingly, beginning in FY 2003, ARC started designating as distressed areas those census tracts within non-distressed counties, other than competitive and attainment counties, with a median family income no greater than two-thirds of the national average and with a poverty rate that is at least 1.5 times the national average. Essentially, distressed areas are designated within at-risk counties (those at-risk of becoming economically distressed) and transitional counties (those that lag behind national norms and often contain pockets of economic distress). Distressed area designations are based on data from the 2000 census. These designations may change annually depending on shifts in the county economic status while the underlying census tract data will be updated with each decennial census.

The U.S. Census Bureau's interactive mapping system can be accessed online at http://factfinder.census.gov/servlet/ReferenceMapFramesetServlet. Census tracts can be located by entering a street address, ZIP Code, or geographic coordinates. The results are displayed on a map, which provides options for panning, zooming, and centering the image. The map's legend reveals that census tract boundaries and their ID numbers are displayed in a brownish-gold color. When the area of interest is found, the census tract ID number can be compared to ARC's Table 2 to determine whether it is a distressed area. The map display can be simplified by changing the boundaries and features on the website to show only states, counties, census tracts, and urban areas.

Sub-county distress measures are used by ARC and two federal agencies, SBA and USDA's EZ/EC program and each depends on decennial Census Tract data.

X. Background on the Appalachian Regional Commission

The Appalachian Regional Commission is a federal-state partnership established in 1965 by the Appalachian Regional Development Act to promote economic and social development of the Appalachian Region. The Act, as amended in 2002, defines the Region as 410 counties comprising all of West Virginia and parts of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia—an area of 200,000 square miles and about 22.9 million people. To promote local planning and implementation of ARC initiatives, the Commission works with 72 Local Development Districts (LDDs) comprising groups of counties within each of the 13 states. The Commission has 14 members: the governors of the 13 Appalachian states and a federal co-chairman, who is appointed by the president.

For 41 years, the Commission has funded a wide range of programs in the Region, including highway corridors; community water and sewer facilities and other physical infrastructure; health, education, and human resource development; economic development programs and local capacity building, and leadership development. The rationale for ARC's Area Development program is to provide the basic building blocks that will enable Appalachian communities to create opportunities for self-sustaining economic development and improved quality of life. These strategic goals were agreed upon after an exhaustive, year-long strategic planning process involving federal, state, and local officials and citizens that focused investment in four goal areas:

1. Increase job opportunities and per capita income in Appalachia to reach parity with the nation.
2. Strengthen the capacity of the people of Appalachia to compete in the global economy.
3. Develop and improve Appalachia's infrastructure to make the Region economically competitive.
4. Build the Appalachian Development Highway System to reduce Appalachia's isolation.

Area Development funds are allocated to the states on a formula basis and each state has wide discretion in deploying those resources across the four goal areas based on local needs and state priorities. However, an overarching policy mandated by Congress is that ARC resources are to be targeted to those counties with the greatest needs—those still the farthest behind that are designated as "distressed."

In FY 2007, the Commission's definitions of economic development levels designated 78 counties as distressed because of high rates of poverty and unemployment and low rates of per capita market income compared to national averages; 78 counties are characterized as "at-risk"; 221 counties were designated transitional, with higher than average rates of poverty and unemployment and lower per capita market income; 26 counties have nearly achieved parity with national socioeconomic norms and are now designated as competitive and; 7 counties have reached or exceeded national norms and are now designated as attainment counties. See ARC's web site for more details (http://www.arc.gov/).